

## ABSTRACT

This invention provides a method for enhancing the cellobiase activity of the strain *Termitomyces clypeatus* using 2-deoxy-D-glucose as glycosylation inhibitor, said process comprises inoculating and growing mycelial culture of (the edible mushroom) *Termitomyces clypeatus*, in sterilized medium containing 0.05 to 5.0% of 2-deoxy-D-glucose in addition to 0.5 to 2.0 % of cellobiose, succinate - 0.5%, 2 to 3% of ammonium di hydrogen phosphate and conventional micro-nutrients at pH between 3 to 8 and incubating at temperatures between 20-35°C under shaking in aerobic conditions, and separating the culture medium by known methods, and using the culture filtrate directly as the source of the enzyme cellobiase and also for endo-glucanase and cellobiohydrolase for use in cellulose hydrolysis.